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ABSTRACT

The model of experiential learning at Warren Wilson College (North Carolina) is described, with attention to the triad of work, service, and academic study and The Center for Applied Student Research (The Center). Student are required to work 15 hours per week on one of 76 work crews; they assume adult responsibility for their work products and can supervise others. Students also complete one 60 hour community service project prior to graduation. To guide the experiential development stages appropriate for the student, an integrated model is used that includes the following stages: (1) applying a skill in many situations and understanding the implications; (2) determining how to use the system and obtain needed resources; and (3) making decisions supportive of production using abstract understandings of the skills and drawing knowledge from diverse fields. Examples of each of the three steps are provided. The Center provides the setting to learn the concept of intra-preneurship; the ability to think, act, and generate the impact of an entrepreneur while existing in a larger organization. Value systems that the Center will help establish and types of research that students might conduct are addressed, along with the concept of developing quality leadership. (SW)

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INTRA-PRENEURSHIP: CENTER FOR APPLIED STUDENT RESEARCH

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OVERVIEW

Warren Wilson College in one of a few American "work and service" oriented colleges such as Berea and Alice Lloyd in Kentucky, Blackburn in Illinois and Lemoyne-Owen in Tennessee having mandatory work programs. The difference between Warren Wilson and the others is a rapid shifting to a more "integrated" concept of experiential education. There is a strengthened commitment to work, service and academics functioning as a "whole". "The schools make work a part of their reason for existence, and work programs assume as much importance - and formality - as the academic curriculum" (Leadership Conference, 1982, page 6). The mission of Warren Wilson College to integrate work, service and academics; the changing concepts in Higher Education favorable to such a mission; and the receptivity of the administration promote the immediate development of enhanced learning opportunities.

My objective is to describe the enhanced model of experiential learning at Warren Wilson College. I will begin with a short discussion of the college triad of work, service and academic study followed by a description of the final vehicle for intra-preneurship; The Center for Applied Student Research.

THE COLLEGE

At Warren Wilson College experiential education has changed from a simple "work requirement" that began in 1894 to an ever increasing integration of every level of the liberal arts learning process. "Experiential" is now taken at its broadest definition. The objective is to cultivate innovation in the same manner as the most successful corporations and institutions: the ability to make creative, incisive and informed decisions applied to real problems - QUALITY LEADERSHIP. As stated by others with the same concerns, the purpose is to stimulate the movement from passive

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to active learning (Whitham and Stanton, 1979, page 27).

The Warren Wilson program is presently unbounded in its ability to expand the experiential learning of each student to meet new trends and needs of professionals in industry, government, and education. The College requires that each resident student work 15 hours per week on one of 76 work crews. Students must assume adult responsibility for their work products and are given the opportunity to supervise others. In addition, each student must complete one 60 hour community service project prior to graduation. Internships are expanding to include more students in greater numbers of disciplines.

The Work Program provides an unusual opportunity to experience the meaning of work, the quality of effort needed to do a job correctly, and a practical approach - using academics and "common sense" to solve problems quickly and effectively. The integration of such a program with service and academics provides a new "learning window" not available under previous conditions.

CONCEPTS

Any existing breach between the academic disciplines and the disciplines of life arise simply from the difference between theoretical and practical reason, the difference between the disciplines of knowing and the disciplines of deciding (Green, March 21, 1977).

How do we bridge the differences? Can we simply teach such skills in a classroom? What skills are we talking about? Are there skills that are generic to all disciplines that improve actual performance of trained professionals? Scientific method? Needs assessments? Historical perspectives? Problem solving?

Employers need individuals who can think wholistically, creatively, non - ideologically and who can see interrelationships and interactions among non - recurrent events. Even the so - called inter - disciplinary studies fail to teach these skills (O'Toole, March 23, 1977).

Our intention was to assure that students would be capable of "substantially rational thought" rather than "functionally rational thinking." Substantially rational thought is rational with respect to both means and ends rather than ends alone. The creativity needed in new situations and the ability to deal with a total situation required the development of such skills.

The classroom by its very nature may provide a relatively narrow, discipline orientation that historically only addresses ends (being provided the "correct" means or procedures). This process

certainly cannot be considered "wrong" within a narrow context but the requirements of decisions in actual life situations requires a broader, more creative view.

We could describe our goal as the development of strategies using the information from academic classes, the experience from work situations and the human understanding derived from service provision.

The "trick" for the students is to understand the particular decision setting within which they find themselves and discover creative ways to identify and obtain improved resources for problem solving.

The process of experiential learning requires that "experience" guided by a carefully constructed system and individual mentors provide the appropriate learning. To handle the complex issues and problems that will face the students of the future it will be necessary for them to "muddle through" within a system of guidance managed to enhance the potential for creativity.

Students must learn to maximize the available information, determine the degree of change feasible and force reasonable decision cycles as a management tool within any particular decision setting. A good measure of the existing literature discusses "decision theory" or "problem solving" either with disdain or endowed with "saving grace." Our purpose is simply to define the utility of decision settings and work toward each student being facile in maneuvering within appropriate cells of the decision space. We believe this engenders creativity, reasonable caution, sensitivity to surrounding situations, appropriate use of reasonable levels of information and decision making.. QUALITY LEADERSHIP.

APPLICATIONS

At this juncture of the discussion we will address individually the three elements of the triad of experiential opportunity: academic study, service, and work.

In the past, each of the elements existed apart from one another causing any integration of effect to be left to the singular ingenuity of each student. When I state that they were apart I reflect the "degree" of formal integration of each within the other. For, although devotion to the intuitive "good" of the triad had decades of history, there existed no unifying conceptual base "linking" the elements directly. Regardless of the past separation of the elements, effects on students have been dramatic as evidenced in their achievements and/or the

revealing expositions in their "senior letters"; a required summary of all experiences, an evaluation of the benefits received, and a consideration of the affect promoted by the unique learning available through the triad.

The final section will apply the conceptual base indicating the planned integration of each element within the other.

Academic Study

The base strength of any institution rests with the quality of its academic program as reflected in accreditation procedures. We will not spend a great deal of time describing this particular element.

Warren Wilson College has the same advantages and problems inherent in the provision of classes within disciplines. The college does not discard the time honored academic "discipline" organization. In fact, the college supports the traditional organization as a means to provide quality education. The conceptual base for experiential education subsumes such a structure as a given. We do not identify the discipline structure as the battle ground for better education. It is the proper "integration" of all elements that determine the "quality" of education received.

The question now before the college community is how do we integrate the academic program more effectively with service and work (as well as the more traditional internships). The possibilities range from such practical concerns as the implementation of eight week terms or 16 week semesters to more developmental issues as the process whereby students can complete specific classwork within a particular work crew or service project. Actions recently taken point to a happy marriage of the elements with academics as we will note in the last section.

Service

The required 60 hour service project has increased its presence over the past few years. During the 1960's the emphasis was strong, waning somewhat in the 1970's and gaining once again in the 1980's. We might perceive the cyclical nature of interest as "normal" and reflective of the public mood during those decades. The hypothesis is most probably correct, but in being true it points to the previous limitations. The service projects, if integral to the learning triad, must not be left totally to the whims of political climate.

The service element now has greater organization and direction. The long range consideration will be an increased linkage to academics and work. Such a relationship will help to determine the type of service project most appropriate for a student with a particular major, work experience and interests. This process should control for the variance possible in such arrangements and assure a general level of quality learning. The ability to "think through" social issues that affect public life, and "working through" community issues and problems requires acquired skills in intellect, negotiation, and active work (Davidson, 1986: page 2). Such an important element in the student's learning schedule must be addressed with as much care and forethought as the development of academic curricula.

The college will now develop service opportunities as enthusiastically as the efforts put forth in the development of internships; always seeking linkage to academics and the work experience.

Work

"Education is a social process...What goes on at the worksite when the learner/intern is there, and how might we talk reasonably and productively about that phenomenon in educational terms?" (Whitman, et.al., 1979: page 1)

The Work Program at Warren Wilson College is an intense production and learning balancing act that places "real" pressures on the students beginning with their first days on campus. The 76 crews are not simply modified classrooms. The work crews actually operate the institution. If the students do not work the institution does not function.

With the "decision model" as a heuristic device the Work Program initiated a redesign to improve the learning situation (1) within the parameters of the Work Program, and (2) within the merged elements of academics, work and service.

Crews will be clustered around each discipline to support the student's selection process to his/her best learning advantage. To support this action the definition of learning within all crews had to be improved.

A major effort to develop a set of Work Program curricula was launched. The first phase includes general supervisory training for all staff supervisors such that a common baseline of knowledge is established. The second phase engenders the development of program standards, performance objectives and learning objectives by work crew - always looking to opportunities to incorporate academic work within the crew functions. The students will be "certified" as to their

knowledge level within a crew, the linkage to an academic course or courses that supported improved production as well as any consultative relationships developed by the student such as the American Society for Quality Control, the American Production and Inventory Control Society or the National Association of Social Work.

We have now taken the sequence one step further through the design of "specific bridging courses" that link academic and work situations. Such courses now planned include a Supervisory Training course and a course on Quality Control, The Liberal Arts and Work. These learning situations will be based in academic study with credit hours awarded but will necessitate the participation of several instructors from several disciplines and the use of the work program as a laboratory for the resolution of problems and the completion of class assignments.

A "quality policy statement" was established by a representative task force that provided the following.

Program Vision

"During the next five years, we want to become the best example of 'education through experience' beyond all other institutions of higher education, an excellent program overall and be recognized as such."

Quality Objectives

1. To ensure that all products or services delivered to the community are of consistent high quality and that these products or services may be used or accepted confidently and safely.

2. To ensure that the education received by the students within the Work Program is organized, structured, and appropriate to the future advantage of each student.

With the program vision and objectives in place, the curriculum development under way, "bridging" courses being developed and several program changes well established, the enhanced integration of work, service and academics could now be pursued.

The establishment of an "integrated sub-system model" sensitive to the requirements and parameters of the decision model upon which the system is based was now possible.

INTEGRATED MODEL

The Dean of Work, the department chairs, the counseling center and the staff work supervisors will now coordinate the learning experience of the students closely. Fostering the ability to maneuver within the appropriate "decision space" is a time consuming process requiring consistency of the student mentors and communication between all parties.

A learning plan will be established for the incoming freshman class that will serve through time as a tool to self-monitor their own learning. Periodically the Dean of Work will speak with each student individually to assure that the previous experiential learning and that planned for the immediate future by the student "fits" into the overall program for the student.

To support the overall planning of the student experiential plan an integrated model is used as a guide to the experiential development stages appropriate for the student.

When the student first arrives it is difficult enough to understand the triad of work, service and academic study. At least one year of immersion in the system is required to properly understand the concepts separately. Munce (n.d.: page 17) describes the process of moving from such basic competence skills to the levels of mastery. Once the student possesses a degree of academic and experiential skills, learns how to use each set internally in concert and can apply the knowledge in new situations not directly related to the training provided he/she has achieved such basic competence.

The next step in the experiential learning process is trough the levels of mastery:

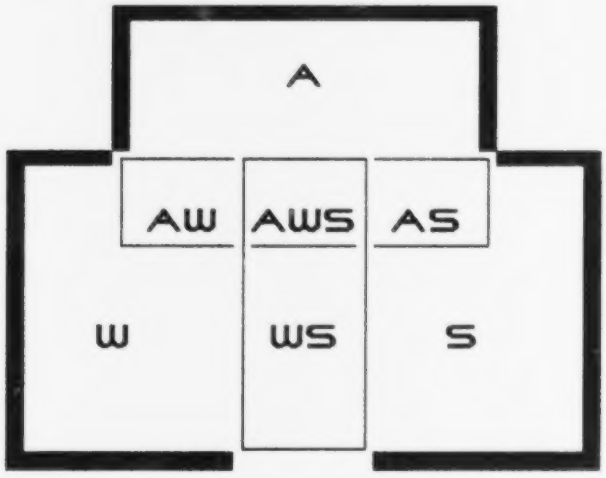
1 Development
Apply the skill in many situations and understand the implications.

2 Expertise
Do something well, without waste and with precision; possibly in combination with different but related knowledge.

3 Mastery
Ability to deal with abstract understandings of the application of skills drawing knowledge from diverse fields to arrive at appropriate, creative and timely decisions.

The model presented in Figure 3 identifies the three levels of mastery suggested by Munce and presented in the context of decision making. Specific applications of each "interlocked subsystem" follow.

FIGURE 3
Integrated Model
Triad of Work, Service and Academic Study



A = Academic Subsystem
W = Work Subsystem
S = Service Subsystem

Phase 1, Development, occurs within the separate subsystems areas defined by A, W or S. The student proceeds to learn the vagaries in process and content of each. As the student becomes immersed in each he/she will begin to "see" the experiential nature of each and identify the permeable nature of their boundaries.

Phase 2, Expertise, is commensurate with the areas of the model identified as AW, WS, and AS. Here the student begins to develop the capability of determining how to use the system and obtain needed resources to gain desired results. Specific examples (although not mutually exclusive) are provided by each combined area.

AW

Where academic study and work combine, the theoretical process and the practical demands of the workplace are merged. One such example includes a systems analysis of

the work program office computer programming needs completed within class requirements of a mathematics course. A second example addresses a cost - benefit analysis of the construction of a farm processing facility by two students (one on the farm crew and one on the horticulture crew) completed within the requirements of an economics and business course.

WS

Where work and service combine, the practical skills of the work place and the philosophy of "giving" are merged. One recent example included the entire Landscape crew in coordination with Enca Corporation to prepare the grounds of a private non profit home for troubled children. A second example includes the student supervisor of the Environmental Studies crew preparing a "how to" manual on waste management and recycling plans at the request of staff from other colleges (who recognized the excellent procedures put in place by the student crew).

AS

Where academic study and service meet, the theoretical process and the philosophy of giving are combined. A recent example includes plans developed by the Education department to have education majors support the design and development of an alternative public high school using knowledge obtained in the classroom while completing the required 60 hour service project.

Phase 3, Mastery, is commensurate with the area of the model defined as A,W,S. The student now has learned to maneuver within the system, to identify and obtain necessary resources, and, to integrate their thought process toward QUALITY LEADERSHIP; the ability to make decisions supportive of appropriate production. A specific example of this setting/opportunity is provided below.

One opportunity formalized by the college at this level defines the Center for Applied Student Research.

As we survey the Center characteristics you will note the high degree of integration required of each element of the triad as well as dependence upon the decision model criteria presented earlier.

Intra-Preneurship: Center for Applied Student Research
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CENTER FOR APPLIED STUDENT RESEARCH

The Center is a rather novel approach to the intensification of undergraduate leadership opportunities.

The Center provides the environment to learn the concept of INTRA-preneurship; the ability to think, act and generate the impact of an entrepreneur while existing in a larger organization. The Center supports what Naisbitt, author of Re-Inventing the Corporation (Warner Books, 1985) describes as the "successful corporate vision": the linking of a person's job with a larger purpose. To accomplish this task a major objective of the Center is the institution of productive time management, peer support, creative thinking, the integrated use of information and other resources, and institution building.

The values systems which the Center will help establish include:

- A belief in always doing one's "best;"
- A belief in individuals and organizations dedicated to superior quality and service;
- A belief in "making things work better;"
- A belief in the use of concrete steps for action;
- A belief in the importance of the details of execution;
- A belief in the constructive use of measured analysis and problem resolution; and,
- A belief in greater productivity through team efforts.

Students at the Bachelor of Arts level can successfully accomplish research on such problems. Suggested efforts include the following:

- Design and implement a computer assisted production and control package for the operation of college auxiliary services;
- Design and implement production and control procedures for a food processing and storage facility; and
- Evaluate the cost effectiveness of alternative uses of local timberland to generate cash crops for local farmers.

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A new measure of LEADERSHIP will be developed. Robert Greenleaf, author of The Teacher as Servant (Paulist Press, 1979), has described the need for "servant leaders" in education and other disciplines; the ability to "see" and "support" development of the best ideas. This principle must be learned by students through guided experience, coaching by mentors and the solving of real problems in a functional team.

TEAMS

The Center operates on the principle of small teams with each championed by students. Such an alternative to traditional learning hierarchies is not commonly practiced in undergraduate educational institutions. Through the team experience the Center will afford the student the opportunity to understand the relationship of personal commitment to achieving an objective and successfully incorporating an innovation in the sponsoring system. J.M. Juran, a major contributor to quality control literature, describes the "team-issue" approach as "project-by-project quality improvement." The student will learn to identify projects to be "tackled", to organize the elements of a solution and to successfully achieve the objective at hand.

THINKING

Students afforded the opportunity to apply their knowledge and curiosity will learn to see the effect of decisions on the entire situation - the connection of cause and effect. Failures will not be seen as end points but as opportunities to be overcome with greater measures of creativity.

Gifford Pinchot III, author of INTRAPRENEURING (Harper and Row, 1985), suggests that the inventiveness of creative thought is only the beginning - as is information absorbed in the classroom. Successful innovation requires movement from that first step where knowledge is gained to implementation.

the strength of this approach is the "grounding" of thought and analysis to everyday problems that the student must confront and overcome.

The student's designs/solutions must not simply look good on paper; they must "work" as defined through actual tests.

OVERVIEW

Purpose: All activity aims at addressing specified issues or solving practical problems within the College and/or the surrounding community.

Intra-Preneurship: Center for Applied Student Research
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Goals:

- To enhance the educational experience of the student through a research matrix organization within the college community.
- To produce practical research products and plans of action for implementation.

Organization: The Center operates within the authority of the college. All functions are administered through the Center directors (Department Chairs and the Dean of Work). Appointed Project Mentors help to explain and remove organizational barriers for the student and will supervise the field research.

The Center will serve well as a vehicle to build further linkages between academic study and the college work crews and between the college and members of outside organizations, associations, and societies acting as consulting members (volunteer) to the Center.

Product: A tangible outcome at the end of each year of activity will be a publication of the Warren Wilson College Press providing an unusual publishing opportunity to the qualified undergraduate student and a base for informing individuals who need guidance in implementing new procedures and practices.

STUDENT CREDIT

Many alternatives are available to support the student's work through the Center. The following is a list of possibilities to be determined by the Directors (in consultation with appropriate college authorities) for each individual student proposal.

- Center Directors may authorize up to three credit hours per semester/per project/per year at no cost to the student;
- Student participation may be authorized and credit hours awarded in conjunction with the completion of the 60 hour Community Service Project required of each student by the College;
- An indication of participation by the student, the title and publication date of the student's article and any awards will be indicated on the Work Program Transcript (the total record of each student's experiential learning);
- Release time from work crews may be authorized up to 15 hours per week for a period of weeks to be determined by the Directors; and,

- Several copies of the Center Annals will be distributed to selected colleges and universities in North and South America, Europe, Asia and Africa to help consolidate a network of institutions of higher education which are participating in Education With Production.

STUDENT ELIGIBILITY

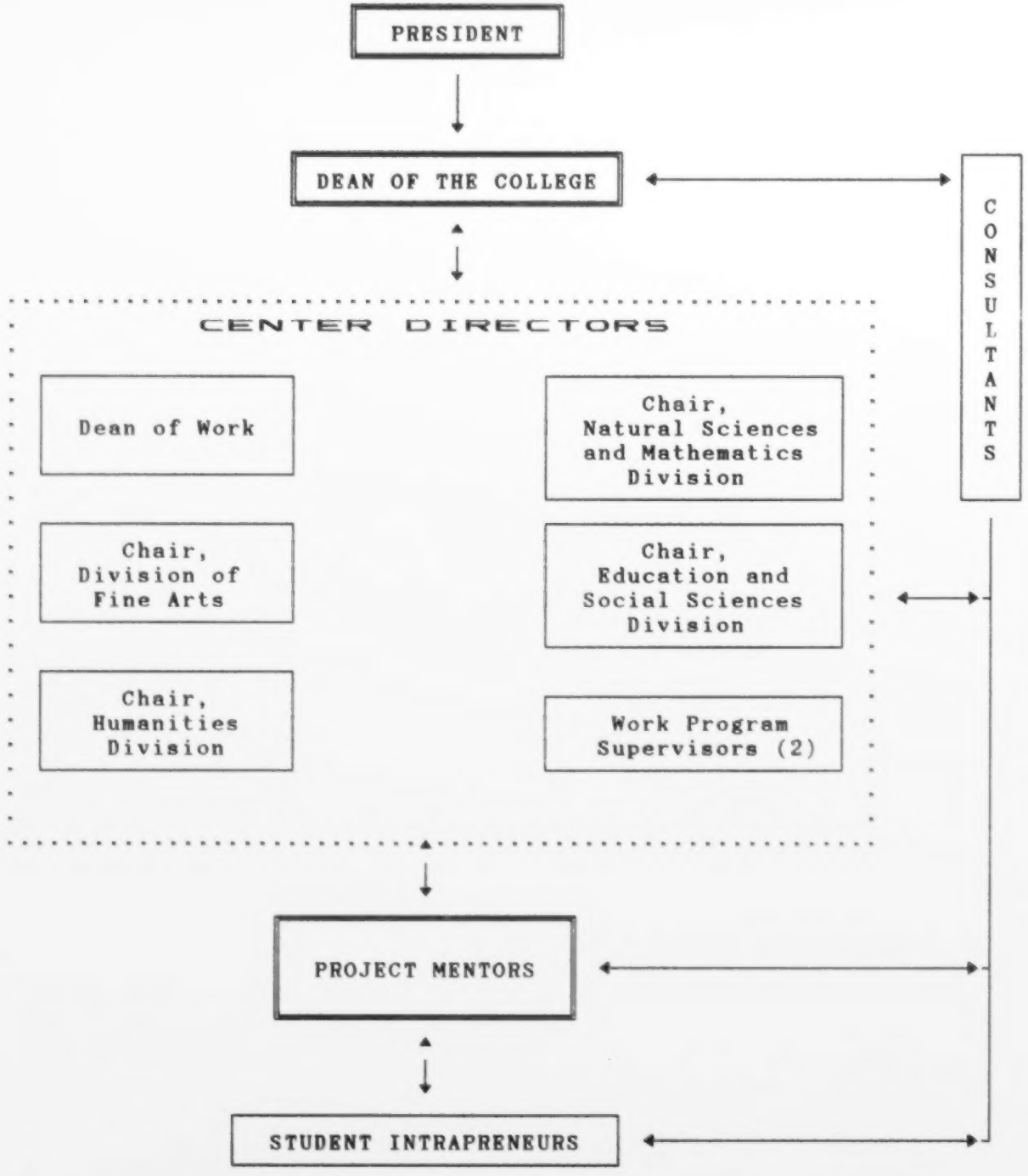
Students will be eligible to participate only if they meet stringent criteria set by the Center Directors.

SUMMARY

There are an infinite number of creative approaches to a liberal arts education.

Warren Wilson College has defined and developed one approach to the total education of young adults through a practical education in the liberal arts. Although many of the concepts that we share with one another are simply "old wine in new bottles," we believe a comprehensive, "integrated" approach to the linkage of experiential and academic education will be a REQUIREMENT OF OUR FUTURE.

ORGANIZATION CHART
CENTER FOR APPLIED STUDENT RESEARCH



SELECTED REFERENCES

Adams, Frank C. and Clarence W. Stephens. College and University Student Work Programs: Implications and Implementations. Southern Illinois University Press. 1970

Bell, Chip R. and Frederic H. Margolis. "Blending Didactic and Experiential Learning Methods" in the Training and Development Journal, August 1978, pages 16 - 21.

Braybrooke, David and Charles E. Lindblom A Strategy for Decision. The Free Press, New York, 1963

Bruner, Jerome S., et.al. A Study of Thinking. John Wiley and Sons, Inc., New York, New York, 1956

Diesing, Paul "Non - Economic Decision Making", Ethics. Volume 66, Number 1, Part 1, October, 1955, pp. 18 - 35

Duley, John S. Learning Outcomes: The Measurement and Evaluation of Experiential Learning. PANEL Resource Paper #6, National Society for Internships and Experiential Education, 1982

Elbing, Alvar O. "A Model for Viewing Decision Making in Interaction Situations from an Historical Perspective", in Alvar O. Elbing Behavioral Decisions in Organizations. Scott Foresman and Company, 1970, pp 502 - 514

Friedman, John "A Conceptual Model for the Analysis of Planning Behavior", Administrative Science Quarterly. Volume 12, Number 2, September, 1967, pp 225 - 252

Green, Thomas F. Higher Education and Work: Some Distressing Ironies. Address presented at Concurrent General Session II on "Work, education and liesure: Triad for the good life" at the 32nd National Conference on Higher Education, sponsored by the American Association for Higher Education, Chicago, Illinois, March 21, 1977

Greenleaf, Robert. The Teacher as Servant. Paulist Press, 1979

Mack, Ruth P. Planning on Uncertainty, Wiley - Interscience. New York, New York, 1971

McKinney, John C. Constructive Typology and Social Theory. Appleton - Century - Crofts, 1966

Moore, David Thornton. Students at Work: Identifying Learning in Internship Settings. Paper #5, Occasional Papers, National Society for Internships and Experiential Education, 1982

Munce, John W. Toward a Comprehensive Model of Clustering Skills Paper #1, Occasional Papers, National Society for Internships and Experiential Education, nd.

Naisbitt, John and Patricia Aburdene. Re - Inventing the Corporation. Warner Books, Inc., New York, New York, 1985

Newell, Allen and Herbert A. Simon Human Problem Solving. Prentice - Hall, Inc., Englewood Cliffs, New Jersey, 1972

O'Toole, James. Education and Work: Questions About the Purposes of Higher Learning. Address presented at 2nd General Session on "Work, Education and tomorrow" at the 32nd National Conference on Higher Education, sponsored by the American Association for Higher Education, Chicago, Illinois, March 23, 1977.

Permaul, Jane Szutu. Monitoring and Supporting Experiential Education. PANEL Resource Paper #5, National Society for Internships and Experiential Education, 1981

Peters, Thomas J. and Nancy Austin. A Passion for Excellence. Random House, Inc., New York, New York, 1985

Peters, Thomas J. and Robert H. Waterman, Jr. In Search of Excellence. Warner Books, New York, New York, 1982

Pinchot, Gifford, III. Intrapreneuring. Harper and Row, New York, New York, 1985

Report on Student Work Programs Leadership Conference. Hosted by Berry College, Mount Berry, Georgia. Funded by The Charles Stuart Mott Foundation, Flint, Michigan. October 4-5, 1982

Shull, Fremont A., Jr., Andrich L. Delbecq and L.L. Cummings. Organizational Decision Making. McGraw - Hill Book Company, New York, New York, 1970

Snyder, Richard C. "A Decision Making Approach to the Study of Political Phenomena" in Roland Young (ed.) Approaches to the Study of Politics. Northwestern University Press, Evanston, Ill., 1958, pp 3 - 38

Intra-Preneurship: Center for Applied Student Research
David F. Sokol / Warren Wilson College, USA

Stufflebeam, Daniel L., et.al. Educational Evaluation and Decision Making. F.E. Peacock Publishers, Inc., Itaska, Ill., 1971

The Antaeus Report. from the Center for the Study of Education and Society, Spring, 1985

The Davidson Round of the Conversations on the Civic Arts. Davidson College, Charlotte, North Carolina. March 27, 1986

Whitham, Michele and Timothy Stanton. "Prefield Preparation: What, Why, How". in Morris T. Keeton and Pamela J. Tate, Editors. New Directions for Experiential Learning: Enriching the Liberal Arts Through Experiential Learning, Number 6. San Francisco: Jossey-Bass Inc., Publishers, 1979, pages 23 - 34.